Response to Comments on the AZPDES General Permit for Discharge From De Minimus Activities to Waters of the United States AZG2004-001

This response was prepared February 6, 2004 to address comments on the draft permit that was noticed in the Arizona Administrative Record on November 7, 2003. The public comment period ended upon close of business February 13, 2003. The comments received, and ADEQ responses, are summarized as follows:

General Comments

1) A De Minimus discharger may be unaware of specific facilities with more stringent requirements. Please address De Minimus discharges, which may be made near those facilities, (particularly on ephemeral listed waters) which are held to effluent dependent criteria. The concern is that an in stream measurement or influence of narrative criteria could be erroneously attributed to the facility with the more stringent effluent limits. Pima

   ADEQ appreciates the commenter's perspective. However, there is no practical way that De Minimus dischargers would be able to know if other plants nearby are discharging to edw standards and, if so, how long or exactly where that reach would extend. These are factors more appropriately evaluated within the scope of an individual permit. A De Minimus discharge is by definition a low flow and/or low frequency event with a minimal risk assuming appropriate BMPs are employed. They are assumed to present little to no longterm risk to the receiving water if the permit requirements are met. Also, since limits in AZPDES permits to ephemeral and effluent dependent waters are applied at the point of discharge it is unlikely that a discharge under the De Minimus General Permit (DGP) would be attributed to a facility with an individual permit.

2) Will ADEQ consider establishing a web site specifically with information needed for the preparations of General Permits? It may be beneficial for all entities if this is inclusive of lists of reaches from the A.A.C. for Unique, Effluent Dependent and Ephemeral watercourses. It should also reference impaired watercourse reaches. It would be helpful to provide links on a central ADEQ site to Arizona MS4's so a small business or those not normally under AZPDES permitting requirements can easily access the proper information and complete proper notification. Pima

   Yes. Presently the ADEQ website has a section on the De Minimus General Permit. Once the DGP is finalized the section will be updated. At that time, ADEQ plans to incorporate links to other sections that contain information on unique and impaired waters, and water quality standards. The current De Minimus General Permit definitions identify documents and website locations where this information can be found. ADEQ will also be evaluating other website enhancements to make the permit as user friendly as possible.

Removal of coverage for leaks and main breaks:

1a. In its fact sheet and email, ADEQ notified stakeholders that it has removed pipeline breaks (unplanned releases of either potable or reclaimed water) from eligibility under the De Minimus rules. While the City understands that permitting an unplanned release is unusual, the City feels that there are situations involving pipeline breaks that would merit coverage as de minimis (either directly through the rules or otherwise). Though ADEQ noted that pipeline failures can be caused by poor maintenance practices, in the City's experience, "main breaks" and associated leaks typically are not a function of lack of maintenance. Once a main line is installed, there is little preventative maintenance that can be accomplished. The City ensures that lines constructed under its oversight are constructed in accordance with Maricopa County standards and good engineering practices.

However, there are portions of the City's potable water lines that were installed prior to the City taking ownership. Typically, "main breaks" are a function of either contractor excavations, poor installation by others, naturally occurring events such as tree intrusions or mechanical failure, or as the City is addressing in its system, material in portions of the system that have reached the end of their life span (i.e. pressure class PVC). As a quick point of reference from the City's statistics: 99-00 COS had 1345 miles of potable water pipe and experienced 244 main repairs = one repair per year for every 5.5 miles of pipe in the system. 02-03 COS had 1817 miles of potable water pipe and experienced 247 main repairs = one repair per year for every 7.35 miles of pipe in the system. Since the City's monitoring program relates directly to "main repairs" in potable water pipe sizes from 3" to 42", this encompasses everything from a hairline crack, to a leaking joint to contractor dig-in, to a pipe failure. The vast majority of these repairs or breaks would release a small amount of water to the street and not reach a water of the U.S. However, under those circumstances where water from such a break could reach a water of the U.S., the release should fall under the de minimis rule or ADEQ should provide clear guidance on how to proceed absent coverage under the general permit. COScot

1b. The draft de minimus permit should include water line breaks for potable and reclaimed water systems. ADEQ's explanation in the Fact Sheet for removing this provision, that line breaks are often due to poor maintenance practices, is inappropriate. Water system maintenance should be the purview of the Safe Drinking Water program, not the Clean Water program. The relevant issues for this permit are the quality of the water discharged, the best management practices required to manage the discharge, and the appropriate monitoring requirements. In the case of line breaks, the water quality will be at least as good as the quality of water discharged under other activities covered under this permit, and the BMPs and monitoring requirements will be very similar.

In addition, line breaks can happen for a number of reasons, and they present a significant hardship for a water system and its customers. Removing permit coverage for line break discharges is not a meaningful incentive for water systems to properly maintain their systems. Instead, lack of permit coverage would simply exacerbate unplanned emergencies that in many cases could not be foreseen or prevented, and would probably pose an additional drain on the limited financial resources of most water systems. PAG

1c. An additional comment related to line breaks is that the general permit is unclear, as it is written in the October 14 draft. Part I. B. 1. lists "discharges resulting from system failures" as being covered by the permit, yet these discharges are not listed in Tables A through D of Appendix A. Tables A through D should specifically include line breaks. PAG

1d. The previous version of the De Minimus permit included releases from line breaks and the current version should continue to include this in both Table A and Table B. The goal of the permit is to protect the receiving water bodies, not control the types of discharge. Although the City of Tucson has an excellent Pipeline Protection Program, the utility delivers 110,000 acre-feet of water through 4,200 miles of pipeline to 200,187 customers. By the scale of the water system, there are bound to be line breaks regardless of preventive maintenance activities. Excluding line breaks from the permit would not improve our pipeline maintenance procedures. A discharge resulting from a pipeline break is an unplanned event and does not indicate poor maintenance. A pipeline leak or break represents a loss in the system and is undesirable due to interruption of service to customers and loss of revenues. CoTW

1e. In Part I, ADEQ has omitted coverage of line breaks under the DGP by concluding that these are unplanned emergencies resulting from poor maintenance practices. The City has an on-going, planned pipeline maintenance program. Therefore, we disagree with ADEQ in it's assessment. Line breaks may be unplanned, but the quality of the contents in the same pipeline is often known. This is precisely the reason why coverage of line breaks should be included in a general permit. We request that ADEQ reconsider it's assessment. If de minimus discharges of Class B or greater reclaimed water are permitted under the DGP, then ADEQ needs to clarify why reclaimed water pipeline breaks from systems distributing Class B or greater reclaimed water should not be included. Or, ADEQ needs to clarify how it plans to individually permit unplanned emergencies. CoGlen

1f. Spills of potable or reclaimed water in very small quantities (50 gallons or less) should be included as a permitted activity. Spills of this size would not pose an environmental hazard. In addition, a spill of such small size generally would take place during a planned line repair, maintenance activity or as a consequence of a system upgrade. Pima

1g. Water line breaks are not covered now under the area wide permit, because they are unplanned emergencies that in many cases result from poor maintenance practices. Contrary to statements from ADEQ concerning the cause of water line breaks; most breaks are not caused by poor maintenance. Recurring line breaks and lengthy line breaks can be the result of poor maintenance if the breaks are not repaired correctly and expeditiously. The general permit should include water line breaks from potable water systems that could result in unplanned discharges to "waters of the U.S." An exception could be made to this if the break lasts more than four consecutive days, or results in discharges of 250,000 gallons in any one day or another acceptable quantity. ADEQ also stated that line breaks may require individual consideration. From an operational and administrative perspective, individual AZPDES permits would not be realistic; by the time an application is completed, submitted to ADEQ, reviewed, a BMP prepared, approval is received, etc., the repair would have been completed some time ago. AZWC

ADEQ acknowledges that spills are often the result of accidents and not always due to poor maintenance practices; further, the reason for removing them from the permit was not related to the perceived cause. Rather, ADEQ considers that leaks or spills are not activities that should be routinely covered under permits. Remediation efforts may be under agency oversight through voluntary or compliance actions, or the agency may use enforcement discretion in responding to spill events. When leaks or spills occur, they should be promptly reported and remediated as necessary. The ADEQ response to such events is better evaluated based on particular circumstances such as the size, effect, and nature of the spill events as well as the discharger's response actions.

Removal of coverage for discharges from used oil and gas lines:

The new AZPDES De Minimus General Permit unexpectedly does not contain provisions that would allow the discharge of hydrostatic test water from used natural gas pipelines into "waters of the United States." Previous versions of the AZPDES De Minimus General Permit included these discharges, and EPNG believes that the final Permit should as well.

This issue is of great concern to EPNG as we are currently implementing our Pipeline Integrity Program (PIP), which includes hydrostatic testing and updating our natural gas pipelines in Arizona. The PIP program is part of our ongoing safety program. The elimination of discharges of hydrostatic test water from the AZPDES De Minimus General Permit will create delays which will impact our safety program and planned maintenance operations. In addition, EPNG serves Southwest Gas Company in Tucson, and Arizona Public Service and several power plants in Phoenix. If EPNG's pipeline is out of service for long periods of time due to the need to obtain individual NPDES discharge permits, this will negatively impact EPNG's customers, and the industrial, commercial and residential customers of Southwest Gas and Arizona Public Service who rely on the consistent availability of natural gas.

ADEQ has stated that it believes that allowing the discharge of hydrostatic test water into waters of the United States through the De Minimus General Permit would conflict with the Aquifer Protection Permit provisions of R18-9-B301(C). That regulation states the following:

C. A 1.03 General Permit allows any discharge from hydrostatic tests of a pipeline previously used for transmission of fluid, other than those previously used for drinking water distribution systems, if all the following conditions are met:

1. All liquid discharge is contained in an impoundment lined with flexible geomembrane material with a thickness of at least 10 mils;

2. The liner material is placed over a layer, at least three inches thick, of well-sorted sand or finer grained material, or over an underliner determined by the Department to provide protection equal to or better than sand or finer grained material;

3. Within 60 days after the end of a hydrostatic test, all test waters are evaporated or removed from the impoundment and taken to a treatment works or landfill approved under 18 A.A.C. 8 to accept the material. Any other methods for removal of the test waters shall be approved in advance by the Department;

4. The liner is removed and disposed of at an approved landfill unless the liner can be reused at another test location without a reduction in integrity; and

5. The test site is restored to its natural grade.

EPNG believes that allowing the discharge of hydrostatic test water under the De Minimus General Permit regulations if certain preconditions were met would not be in conflict with the APP Provisions of R18-9-B301(C), but would only serve to provide additional flexibility to those conducting such tests by allowing them either to build a lined pond and evaporate the contents within 60 days if the post-test water were unsuitable for direct discharge or, for water which did meet such standards, discharge the water in a controlled manner to waters of the U.S.

If discharge authorization through the De Minimus General Permit is not available, a hydrostatic tester would be required to obtain an individual NPDES permit for each hydrostatic test water discharge. The option of obtaining an individual NPDES permit for every discharge would not be feasible due to the long lead time needed to obtain individual permits. The licensing time frame for an individual Major Facility NPDES permit is 284 days with “No Public Hearing” and 329 days with “Public Hearing. The licensing time frame for an individual Minor Facility NPDES permit is 221 days with “No Public Hearing” and 266 days with “Public Hearing”.

ADEQ has historically allowed EPNG to discharge hydrostatic test water from natural gas pipelines into waters of the United States in at least two separate instances. The first permit was for 5 million gallons and the second for 2 million gallons. In the first project, the test water was initially placed into a lined pond and then treated through an activated carbon filtration system and discharged into “waters of the U.S.”. In the second project, the test water was placed into a lined hay-bale retention pond and discharged into waters of the United States. It would take a very large pond to contain 5 million gallons and have it be shallow enough to allow evaporation of the contents within 60 days. If a smaller and deeper pond is built, the cost of trucking the pond’s contents would be very expensive.

EPNG believes that requiring the construction of an evaporation pond or have the discharge water trucked away may make sense if the quality of the discharge water is not appropriate for direct discharge. Where, however, the discharge water meets applicable standards, controlled direct discharge is appropriate and can be accomplished without significant environmental disruption. EPNG “pigs” its pipelines prior to conducting hydrostatic tests. A “pig” is a device with brushes that helps to push any liquids in the pipeline to a central collection device for collection and proper disposal. Therefore, the quality of the test water being discharged after a hydrostatic test is generally good. The General NPDES Permit limits for oil and grease in the States of Colorado and Wyoming is 10 mg/L. The limit for the ADEQ-permitted hydrostatic tests discussed earlier was also 10 mg/L. The oil and grease limit for De Minimus Discharges to Perennial, Intermittent or Canals with DWS Receiving Waters in the ADEQ proposed rule is also 10 mg/l. We respectfully suggest that the De Minimus Permit should set reasonable discharge limits for oil and grease and other contaminants of concern and require that the water be discharged in a controlled manner, but it should allow the discharge of hydrostatic test water that meets the stated limits.

In fall 2002, I joined the AZPDES General Permit Stakeholder Group. The early drafts from the group included both hydrostatic test releases from new and used natural gas pipelines. Ms. Shirley Conard sent an email on 4/14/2003 to the AZPDES Stakeholders stating:

Attached is a draft version of the long-awaited AZPDES De Minimus General Permit. In evaluating this permit, ADEQ revisited what we are trying to accomplish – that being, to provide a mechanism for efficiently permitting a significant number of discharges that are short-term, temporary, and generally low hazard. To reflect this, the scope of the permit has narrowed somewhat. We have kept the concept of providing enhanced monitoring, review, and restrictions on discharges as they progress from ephemeral waterways to unique and impaired waters that need the most protection. We have included a provision to allow utilities areawide coverage over the full permit term. We have also included provisions for monitoring results to be submitted to ADEQ at certain intervals; this will allow us to collect data and better evaluate the potential impacts of such discharges that will be helpful in the long term in developing or modifying subsequent permits.

The 4/14/2003 email included hydrostatic testing of used natural gas pipelines and included a 10 mg/L oil and grease limit. By continuing to include hydrostatic test discharges from used natural gas pipelines in the AZPDES De Minimus General Permit and setting an oil and grease discharge limit, ADEQ would be efficiently permitting short-term, temporary, and generally low hazard discharges. In addition, the water would be beneficial to the environment, especially during our current drought conditions.

EPNG believes that the authority to discharge through the De Minimus General Permit should also extend to discharges arising from hydrostatic testing of lines being returned to service after a line break. This is particularly of importance because the need to repair a line is often the result of unplanned line outages. In such cases it would be particularly difficult to obtain case-by-case NPDES permits in a timely manner.

Therefore, for the reasons discussed above, EPNG respectfully urges the Department to continue including hydrostatic test discharges of used natural gas pipelines within the scope of the AZPDES De Minimus General Permit regulations as originally included in the earlier version of the regulations and to develop appropriate mechanism to address discharges from line breaks. EPNG

Response:

Based on the comment and review of the APP general permit, ADEQ is allowing discharges from used oil and gas pipelines that are managed in accordance with the APP general permit but can not be evaporated within 60 days. Per the revision, these hydrostatic tests waters may be discharged under the DGP provided testing shows that they meet all applicable surface and aquifer standards and the release has been approved under A.A.C. R18-9-B301(C)(3). Request for authorizations (NOIs) for these discharges must be accompanied by quality data on the discharge and an approved release under A.A.C. R18-9-B301(C)(3). See Part I.B.4 of the DGP.

These discharges are not eligible for areawide coverage, but may obtain coverage through the individual NOI process.

Part I.B. Eligibility

1a. Why does the definition of utility only include operators that distribute "water, oil or gas"? If this remains the way it is written, that means provisions which exclude utility vaults from coverage only apply to the water, oil and gas utility companies. In reality water accumulations in water and gas vaults are much less likely to be contaminated with persistent or extremely hazardous materials than telecommunications and electric vaults are. SWGas

1b. We are very surprised to see utility vaults excluded from coverage, particularly when the state of California successfully adopted and implemented a general permit for utility vault dewater several years ago. The vault dewater provisions really need to be applied to all utilities. Perhaps dewatering could be allowed provided an applicable BMP is preapproved by ADEQ. SWGas

To avoid confusion the word "utility" has been removed from Part I.B.2." The purpose of the utilities definition was to allow applicants expected to have pipeline systems that would require hydrostatic

tests to be covered by an areawide authorization. Discharges from vaults are not totally excluded; approvals may be granted on a case-by-case basis under Part I.B.7.

1. Part 1. A. 6 The proposed permit limits coverage for the four categories of discharges in this section to ephemeral and effluent dependent water bodies, and canals without DWS standards. The permit should authorize discharges to all water bodies other than unique water bodies for the following reasons:

   a. ADEQ has not justified the distinction between allowable and non-allowable receiving water bodies with regard to pollutants that are specific to these types of discharges. What pollutants are expected to be present in residential non-contact cooling water, charitable car washes, building and street wash water, and dechlorinated swimming pool discharges that have different water quality standards for different receiving water bodies? Are the standards for expected pollutants different in warm water and effluent dependent water bodies? Are there pollutants that are characteristic of these discharges for which DWS canals have more stringent standards than non-DWS canals? Without determining this, and justifying this distinction by comparing water quality data for these discharges to different water quality standards for different water bodies, ADEQ is arbitrarily limiting the scope of coverage under the proposed permit for these types of discharges. If a discharge for which the contaminant of concern has the same standard in warm water and effluent dependent water bodies (e.g., swimming pool drainage: chlorine), such a discharge should not be allowed in one type of water body and prohibited in the other. There is also no reason to authorize potable water system discharges (with appropriate BMPs) to perennial water bodies under this permit, but to disallow dechlorinated swimming pool water discharges to the same water bodies.

   b. Limiting authorization under this permit for these commonplace residential, commercial, and non-profit activities to discharges which will only reach certain types of water bodies creates an impossible permitting and enforcement responsibility for ADEQ. There are tens of thousands of residential swimming pools in Tempe. Determining what the receiving water body is for drainage discharges from these pools, and requiring those dischargers to obtain separate permit coverage if their discharge ultimately reaches a municipal lake, is an impossible task for ADEQ's compliance and enforcement section. Failure to do so, however, will undermine the force of the general permit for deminimus discharges. If ADEQ cannot take enforcement action against individuals who discharges without a permit, why should other individuals bother to obtain permit coverage even if they qualify? Issuing a permit that is in the least bit unenforceable makes the permit entirely unenforceable. COT

   ADEQ notes the comments concerning residential swimming pools and appreciates the scope of the regulated universe. It was our intent with this permit to provide legal authority to cover a common practice that is usually not of environmental consequence. Although ADEQ does not envision this will be a priority for enforcement, in the event that discharges from one of these sources were directed to a prohibited waterbody, there could be regulatory consequences for discharging without a permit in violation of the rules and the Clean Water Act.

   Since the "other discharges" are not required to submit an NOI, conduct monitoring, or develop and implement Best Management Plans, ADEQ considers it appropriate to limit the types of receiving water that they may be discharged to. However, the major parameters of concern, chlorine, oil and grease, and most metals are the same for effluent dependent and aquatic and wildlife warm waters. Therefore, ADEQ has removed the coverage for these discharges to effluent dependent waters as well.

2a. Reclaimed water overflow. The City requests that ADEQ consider adding a section under Appendix A, Tables A and B to allow for overflow of reclaimed water to ephemeral washes or effluent dominated water bodies. This would make for a parallel provision between the potable water overflows and reclaimed water overflows in situations where there would be a deminimis impact. CoScott

2b. Spills of small quantities of potable water and reclaimed water during maintenance or repair activities should be included in the general permit coverage. PAG

See response under ***Removal of coverage for leaks and main breaks above.***

Part I.C. Limitations on Coverage

1. It is unclear what is meant by "…not in conformance with any Total Maximum Daily Load (TMDL) that has been issued." ADEQ's response to a similar comment in the *Response to comments received on August 7th version of the De Minimus General Permit* document does little to clarify the meaning of this requirement. The response is clear a discharge cannot exceed the TMDL assessed for the particular water body. However, TMDL may be established for contaminants not specifically regulated by this permit nor expected in the de minimus discharge covered under this permit. It is unclear how discharges would comply with this condition. We request that ADEQ clarify this condition so that permittees will be able to take steps to comply with it. CoP

   As you know TMDLs are written for waters that are not attaining a designated use (have an exceedance of some standard applicable to the water). TMDLs will only address the parameters for which the stream is not attaining the use and set a limit for the amount of that parameter that can be discharged to the stream. No AZPDES permit (including a general permit) can be written that would allow discharges above a limit set by a TMDL.

   TMDLs may set limits which are lower than the WQ standards applicable to a given waterbody or they may limit discharges of specific parameters to a given waterbody. Any requests for authorization under the DGP for discharges to a water which has a TMDL would have to meet the levels set in the TMDL for whatever parameters the TMDL addresses or authorization would be denied. If the TMDL addresses contaminants that are not in the discharge, there will be no practical effect to the permittee, except that ADEQ may request discharge characterization to verify that the TMDL constituents are not present. (See response to comments 1a-c under comments on Appendix A – Tables A through D.)

Part II. Authorization

1. Part II.A.1. – This condition should be clarified by adding "or develop a BMP plan" after, "is not required to submit an NOI…" Part IV.D.1 should also state that dischargers of residential non-contact cooling water, charitable car washes, building and street wash water, and dechlorinated swimming pool water are not required to develop a BMP plan. This should also be clarified in Part VI.C of the fact sheet. COT

   The statement has been added for further clarification. Part I.A.1 does specify which parts of the permit "other" dischargers must comply with and the requirements for BMP plans (Part IV.D. 1) are not included.

2a. In Part II.A.3, ADEQ requires that the NOI for area-wide coverage "must inclusively identify all activities and list all known discharge locations to be covered". Additionally, in Part III.B.5, ADEQ requires that each discharge point be identified by the latitude and longitude coordinates. For large municipal systems these requirements will be extremely burdensome, if not impossible, to complete. Therefore, it is suggested that a general description of discharge locations be incorporated in lieu of the specifically identified discharge locations, for area-wide NOIs. CoGlen

2b. The statement that a NOI must inclusively identify all activities and list all known discharge locations may be impossible for a large public water system like Phoenix Municipal Water System. We propose a general description of the types of activities. CoP

   AZPDES permits are required to designate discharge locations by latitude and longitude. For purposes of the DGP and potable water systems, the locations required to be identified would be for well discharges and overflows at reservoirs or other known and static locations. However, the areawide permit also allows discharges from locations which are too numerous (such as fire hydrants, pressure

valves, etc.) and although they must be identified as a class on Table 2 of the areawide NOI, they are not required to be individually identified by latitude and longitude.

3. Part II.B.2 – See recommended changes to paragraph in red. "Unless the Director notifies the person to the contrary, a person who submits a complete and accurate NOI is authorized to discharge to a perennial water, intermittent water, or canal with drinking water source, under the terms and conditions of this general permit, thirty (30) business days after the date of the NOI is received by the Department." CoP

   The suggested change has been made.

Section D. Modification

The District appreciates ADEQ incorporating a modification section within the general permit under the areawide authorization to include additional discharge locations. MDWID

ADEQ appreciates the comment.

Part III. Notice of Intent Requirements

Section B. Contents of Notice of Intent

1. The rationale of the District's previous comments on eliminating ADEQ's requirement of having a topographic map contradicts ADEQ's Drinking Water Program requirement to have water systems to use valve maps. These types of maps do not have topographic contours, but are intended to show all of the details of the water system's infrastructure and sometimes show major and minor washes. Converting these maps to have elevation contours would be an unreasonable expense to water systems. The District contends that valve maps are sufficient for the purposes of the general permit. MDWID

   As stated in an earlier response, topographic maps are a standard provision in all AZPDES applications. The location of the major and minor washes and drainage patterns and direction of flow is important information for the evaluation of authorization requests. Clearly maps that only "sometimes show major and minor washes" and don't have topographic contours would be of limited use. In addition, water system valve maps likely include information not relevant to the DGP, unless the valves are considered discharge locations.

2. Under Part III.B, "Contents of Notice Intent," the NOI is to list the name and address of the facility/site location. What is the definition of facility/site location? Are water providers to list addresses of all well sites, customer services, and fire hydrants? This section also mentions listing the name and address of the owner of the property on which the discharge is to take place. When fire hydrants are listed in public right of way who is the owner, the City or the County? This concept needs further clarification. Listing the latitude and longitude of the point(s) of discharge for area wide permits is not practical and is too cumbersome. AZWC

   The facility address was not required on the NOI for areawide authorizations. The requirement in Part A of Appendix B (NOI for individual discharges) has also been changed to include the address if one exists for the facility site. If no address exists driving directions to the site must be given.

3. Still under "Contents of Notice Intent," No.10. states that the estimated average and maximum daily flow rates be listed. This is unclear and vague. Does ADEQ mean for each potential point of discharge, or are we to group the categories of discharge together, (e.g., ephemeral, etc.)? The estimated total volume to be discharged is to be calculated. Is the calculation for each discharge, or cumulative discharge for the whole service area? Listing the type, location, date, approximate frequency, and duration of the discharge(s) is too numerous and burdensome. Again, is this from each discharge, or a cumulative total for the whole system?

For an areawide authorization, the intent is that the information in Part III.B.10 would be for each known discharging location. A Discharge Information Form (Table 1 of Appendix D) would be filled out for each known discharging location and attached to the Areawide NOI. Unspecified discharges are more generally described on Table 2 of Appendix D. This would be the form used for fire hydrants and other too numerous to specify discharges. Note, however, that Table 2 is only applicable to discharges to ephemeral and canals without drinking water source uses. The use of Table 2 for discharges to effluent dependent waters has been removed consistent with the response to comment 1 under "Eligibility" above.

4a. In Part III.B.11, ADEQ requires that the NOI include a legible, scaled map showing the path from the point of initial release to the point of discharge to a water of the U.S. For large systems, and/or those seeking areawide coverage, this requirement will be extremely burdensome, if not impossible to complete. In large area-wide systems the pathway that a discharge takes may be complex. Mapping of all possible pathways for all potential discharges, in such systems, would very quickly exceed the legibility requirements and would be extremely burdensome to the applicant. Additionally, there are public water system security concerns with submission of maps showing potable water system infrastructure (points of release). CoGlen

4b. To provide a legible, scale map showing the flow path of every discharge, within a large water system, from the point of initial release and the point of discharge to a water of the U.S. will be impossible, or at the very least be labor intensive. It will require field staff to include among the things they do to follow the flow path from the point of initial release to where it either enters a water of the U.S. or the MS4. This will add substantial time to the existing duties of the field crews. CoP

4c. Part II.A.3, "Application for Area Wide Coverage for De Minimus Discharge within Municipal or Utility Service Areas," states that the NOI must inclusively identify all activities and list all known discharge locations to be covered. This concept is impractical and too burdensome. A suggestion would be to have a map of the service area with locations listed of recurring discharges (e.g., wells, etc.) and locations where discharges greater than 250,000 gallons per day are likely. AZWC

4d. A legible scaled map showing the path from the point of initial release and the point of discharge to a "water of the U.S." in Section II.B.11 is just not possible or practical for area wide permits because of the numerous likely points of discharge. The permit should incorporate an area wide watershed type of map that shows the flow paths of all streams, washes, etc., so the water system doesn't have to recreate them, which would save time and reduce errors by the water system.

ADEQ appreciates that there may be a burden in assembling this information. However, this permit has numerous conditions that require the discharger to know where the discharges are going and what waterbody(s) it may reach. This is a basic premise on which the permit is based and such information is critical to determining the monitoring and BMPs necessary to comply with the permit. Assuming a discharge travels from the point of release by gravity, there should be one typical path of travel for each discharge (4a).

The suggestion in comment 4c, is not incompatible with the requirements of Part III provided it is legible topographic map and properly referenced on the Areawide NOI Discharge Information Forms.

5. Part III, Notice of Intent Requirements. This section should clarify that several of the items required to be submitted with the NOI are not applicable to applicants for area-wide coverage. Specifically, number 5 (latitude and longitude of discharge point) and number 11 (map showing flow path) are not applicable. COT

Latitude and longitude as well as the map showing the flow path are required for all specified discharges in the areawide permit. Only the unspecified discharge locations (such as fire hydrants and pressure releases) given on Table 2 of the areawide NOI do not require this information. Clarification has been added to Part III.B. 5, 10, and 11.

6. Part III.B.12 – For a large water system, a BMP Plan should be general in nature, outlining alternative methods and procedures to minimize the impact of the discharges. Also, see comment on Part IV.D below. CoP

   The BMP Plan may be generalized by grouping or describing BMPs applicable to given discharge situations. However, the BMP Plan must also include specifics so that those required to implement the plan will definitively know what BMPs to apply to a given site. Additionally, the plan must have enough specifics to advise ADEQ of the practices that we can expect to be in place at the time of an inspection.

7. Filling out the Notice of Intent (NOI) form will be cumbersome, lengthy, and confusing for small water systems. Having to follow and map the discharge pattern of the point of release, for each point of discharge, will be a challenge to all water systems. Then, trying to identify the receiving water and its name will be a task in itself. Technical Assistance (TA) will be needed for this part of the process. Small water systems have a lack of funding to hire TA providers. Arizona Department of Environmental Quality (ADEQ) should award contracts to TA providers to assist the small water systems with this process. There continues to be more paperwork, monitoring, and reporting to do, with less time, manpower, and money to accomplish them. This trend will not end any time soon, with all the upcoming regulations from the Environmental Protection Agency (EPA). Grant money was available from EPA for Vulnerability Assessments, and EPA grant money should be used for this permit program as well, to achieve the most participation, understanding, and compliance with this new permit from all water providers. AZWC

   ADEQ appreciates the commenter's concerns, however, at the present time grant money is not available for these efforts. ADEQ will evaluate the need for, and options for, outreach activities related to this permit. As with other permits, ADEQ staff will be available to answer questions relating to completing the NOI.

Part IV.B. Discharge Prohibitions

1. Item IV.B.1 says, "Discharges in a location or manner different from that described in the NOI or regulated by the general permit are prohibited." If a new well is brought on line, does a NOI have to be amended? What about new fire hydrants that are added during the year – does an amended or new NOI need to be submitted? The permit is termed a "general area wide permit," so it should encompass all new discharge points without having to specify and name each one. The list of discharge locations could be updated every time a new NOI is completed. AZWC

   Since wells are specified by location, addition of a new well would require submission of a modification to the authorization Part III.D.2). Addition of unspecified discharge facilities that already fall within a class identified under the Table 2 provisions of an Areawide NOI (such as adding additional fire hydrants) would not require modifications to the authorization.

2a. Part IV.B.2 - ADEQ does not have the authority to regulate environmental nuisances under the AZPDES permit program. The discharge prohibition that refers to the prohibition of odors, vectors, and other nuisances of wastewater origin should be deleted. ADEQ's response to this comment in the *Response to comments received on August 7th version of the De Minimus General Permit* document did not state why they disagreed with the comment. The permit condition is vague and any implementation of this condition would be subjective. For example, how many flies or mosquitoes would constitute a nuisance? A.R.S. § 49-141.A gives ADEQ authority to regulate environmental nuisances but we disagree that the AZPDES permit is the proper vehicle for implementing this statute. Practically speaking the statute is self-implementing. However, if this is not an adequate enforcement mechanism the City believes ADEQ should adopt rules prescribing the minimum standards for the prevention and abatement of these nuisances pursuant to A.R.S. §. 49-141.B. The City requests an explanation as to why ADEQ believes that environmental nuisances can be included in an AZPDES permit. CoP

2b. Part IV.B.1 and 2- This section of the permit establishes discharge prohibitions for discharges that are not regulated by the permit, and includes odors, vectors, and other nuisances in the list of discharge prohibitions. A condition in the permit prohibiting discharges that are not regulated by the permit is a contradiction. A permit can only regulate discharges that are authorized under the permit. Odors, vectors, and other nuisances are not discharges that can be prohibited, but are nuisances that can be created as a result of discharges". They are covered under A.R.S. § 49-141. Creation of such nuisances is illegal under 141, but should not be listed in this permit as a "discharge prohibition". CoT

This section has been removed from the permit. A sentence has been added to Part V.A.2 to clarify that the DGP does not authorize any permit related condition that may be otherwise determined a nuisance.

3. Part IV.B.6 – This whole statement should be omitted. The parameters covered by this permit can be no greater than those included in the Surface Water Standards. CoP

This section has been deleted. The parameters referred to are included in the surface water quality standards. A.A.C. R18-11-114(K) lists bioaccumulative pollutants and specifies that a mixing zone can not be granted for those pollutants. Since no mixing zones are granted by the DGP these pollutants (as with all pollutants in the permitted discharges) must be at or below the Water Quality Standards prior to discharge to waters of the U.S.

Part IV.D. Best Management Practices

1. Part IV.D – BMP for an areawide general permit should be more general in nature rather than prescribing procedures for every discharge event during the life of the permit. CoP

As stated previously, a BMP Plan may be generalized by grouping or describing BMPs applicable to given discharge situations. However, the BMP Plan must also include specifics so that those required to implement the plan, and ADEQ, will definitively know what BMPs apply to a given site. The BMP Plan must identify what practices will be used to minimize pollutants in the discharge and comply with permit conditions. An adequate Plan should not need to be changed for each discharge event unless there has been a change to the facility (Part IV.D.4) or the stated BMPs are not achieving the goals.

2. Under Part IV, Special Conditions, Section D, of the General Permit, Best Management Practices (BMP) are described. According to the permit requirements, a BMP has to be prepared and implemented, but not necessarily turned in to the ADEQ. Preparing BMPs is time consuming, burdensome, involves great detail, and will require technical expertise that most of the smaller water systems don't possess. ADEQ should provide TA or funding in some way to help create and implement this new permit. Small water systems will discharge improperly without a BMP in place, or won't discharge at all, leaving their water system prone to bacteria growth, sediment buildup, etc., which would not be in the best interest of the consumer. AZWC

ADEQ appreciates the commenter's concerns and will evaluate options to distribute additional information on this subject. Unfortunately, funding is not available at this time.

3. Listing of the weather conditions for an area wide permit is too broad and variable over the course of the permit. Another area that is unclear is the adjacent land uses, downstream uses, and potential flow path of discharge. Are systems to list this for a specific discharge or the entire service area? Again, this is not practical or reliable. A watershed type map that shows the wash, stream, etc. flow patterns or potential patterns should be used in this case as well. The possible need for sampling receiving water prior to discharge should be for perennial and unique waters only. The individuals listed on the permit to monitor, observe, sample, etc. will change over the period of the permit. The annual certified operator list supplied to ADEQ should suffice for this. An updated BMP should not be required if there is only a change in the water system operator. ADEQ should refer to the current list of certified operators on hand. New operators will receive a copy of the BMP. Where the permit states, "Prevent erosion, scour, or sedimentation in receiving water due to discharge," it should read, "Minimize and limit/control of erosion…" AZWC

Part IV.D.1 lists things that must be considered in developing a BMP plan. "Weather" has been changed to "climatic". It is not expected that the plan would be changed each day to describe the weather at the site. There may be differences identified in the plan, however, based on whether activities occur during the dry or the wet season. Some BMPs may work on every site, but others may only be appropriate for sites with specific characteristics; the Plan should specify the conditions when such BMPs are appropriate. Also, monitoring requirements will be dependent on the receiving water. BMP plans for areawide authorizations may identify BMPs appropriate for similar discharges (i.e. well discharges) to same type of receiving waters and site characteristics as appropriate. However, these must be detailed enough that those implementing the plan will be able to identify the BMPs needed for each site. Part IV. D.1.c has been revised to indicate that receiving water monitoring is not required for ephemeral waterbodies. Also, the wording in Part IV.D.2.c has been changed from "prevent" to "minimize".

Part IV.E. – Monitoring and Reporting

1. "*All monitoring results shall be maintained by the permittee… submitted to ADEQ… at the end of the **fourth** year of this permit."* This seems to extend the 3year requirement for retention of records, which is mentioned through out the Fact sheet and Permit. Pima

   Monitoring records are to be kept for 3 years after the permit expires or an NOT is filed (Appendix A, Part C.5.a). Most utilities with areawide permits would not be filing NOTs. Therefore they would maintain their monitoring records for 3 years after the general permit expires. The fact sheet has been clarified.

2. Part IV.E.1.b, should state that, "The permittee shall, at a minimum, sample the parameters indicated in Appendix A, Tables A-D based on the appropriate classification of *receiving* water and at the listed frequencies." Sampling shall be taken of the discharge when it is required. If testing for E-coli, this is not practical. The water will be on the ground, which would result in a positive sample. AZWC

   "Receiving" has been added before water for clarification. Samples of the discharge should be collected prior to the discharge reaching the ground if at all practical. In the event the discharge does reach the ground, it would be expected to have high fecal coliform levels, but may or may not have significant E. Coli levels. The sampling location and background conditions may have to be evaluated when reviewing the sampling results.

3. Monitoring results of discharges occurring for more than four consecutive days or greater than 0.25 mgd shall be submitted to ADEQ. This statement in section IV.E.2.b should be changed to say, "250,000 gallons discharged in any one day." A quantity of 0.25 million gallons per day (mgd) is a flow rate of 174 gallons per minute (gpm). The amount of water discharged should be the appropriate measure, not a flow rate. AZWC

   The requested change has been made.

4. "Monitoring and Records" in Part V.J.3.e requires the analytical techniques or methods used be listed. Other items listed should include: type of field test kit used, manufacturers' name, model number, operating range, and detection level. AZWC

   Sections a through e of PartV.J.3 have been removed. The same monitoring requirements were in Appendix A. The model number of equipment used was added to the requirements.

Part V.B - Duty to Reapply

1. **"***If the Director does not reissue a general permit before the expiration date, the current general permits will be administratively continued and remain in force and effect until the general permit is reissued***"** Does the Department wish to have this extend to those General Permits issued on Unique Waters? Pima

Yes, the current DGP would remain in effect until the Department issues a new DGP. Therefore, all existing authorizations to discharge under the current permit would remain until the new permit is issued (or until the current DGP is terminated or revoked.) However, no new authorizations could be granted until a new permit is issued.

Part VII – Definitions

1. Environmental nuisances – This definition states that it covers situations "that is not otherwise subject to regulation under Title 49." What is ADEQ's statutory authority to regulate these situations or conditions? CoP

   The definition has been removed since the Part IV.B.2 language relating to nuisances has been removed. See comment above on Part IV.

2. "*Impaired Waters…found on ADEQ website at http://www.adeq.state.az.us/environ/water/assess/305/index.html.*
   There does not appear to be an easily accessed list of descriptions for impaired waters reaches, just generally delineated. Perhaps embedded in a document at this site. The lists appear watershed based. Pima

   Yes, the lists are watershed based. Maps are available on the same site by both watershed and county. The maps show both impaired waters (listed on the 303(d) list and unattaining waters (those with TMDLs, but not yet attaining designated uses). There is a link to the 305(b) report, Appendix D. The waters considered impaired for purposes of the DGP are in Part 4 and part 5 of Appendix D. More information has been added to the definition to help in finding the lists. [Note ADEQ has revised its website. The definition has been revised to give the new address for the 305(b) report (http://www.adeq.state.az.us/environ/water/assessment/305-02.html).

3. "*Unique Waters…found on ADEQ website at http://www.adeq.state.az.us/environ/water/assess/305/index.html. "*
   There does not appear to be easily accessed list of descriptions for unique waters reaches. The lists appear watershed based. (Perhaps use R18-11-112). Pima

   This website is not listed in the DGP under "unique water". The definition references A.A.C. R18-11-112 and A.A.C. R18-11-109(H). The reference to 40CFR 131.31 has been removed since the federal nutrient standards for Arizona have been depromulgated.

Appendix A

1. General- Discharge monitoring should not be required for discharges that are truly considered to be "deminimus".

   ADEQ disagrees. As stated in previous responses, these discharges have a potential to cause water quality concerns and are de minimus ***only*** *when appropriately managed. Monitoring is required to determine that BMPs are implemented and effective. We also note that monitoring of such discharges has been routinely required for a number of years in the Temporary Emergency Waivers or Authorizations to Discharge that ADEQ has issued for these types of discharges.*

2. Part C.1.b - This section requires permittees with area wide coverage to submit results of all monitoring required by the permit for discharges exceeding specified durations and/or volumes no later than October 1, 2007. The requirement is unattainable. The proposed permit will expire 5-years after the date of issuance, or approximately December 31, 2008. Accordingly, results for any monitoring by the permit, will not be available until October 1, 2007.

   The language has been changed. The intent was for submission of any monitoring results done prior to October 1, 2007 to be available for review when ADEQ is considering renewal of this permit. Since

the review of data for permit renewal is expected to require considerable time, the timeframe for submittal of data has been changed to approximately one year prior to permit expiration. The results of any monitoring of discharges of the specified volume and/or duration done prior to January 1, 2008 are required to be submitted by February 28, 2008.

3. Part C.3 – This section requires pre and post discharge photographic documentation for discharges exceeding 4 days in duration or 0.25 mgd in volume. Such documentation is impossible for emergency discharges. This condition should specify that it is not applicable to emergency discharges. COT

   ADEQ agrees and language has been added to allow only post photographic documentation of emergency or unplanned discharges. Note that significant line breaks are no longer covered by the DGP. However, other unplanned discharges, such as reservoir overflows, are included in the requirement for photodocumentation.

4. Monitoring and Reporting, Appendix A, Number 3, under Field Monitoring, would now require employees to carry a field log book. This takes time away from already overworked water system employees from running, in most cases, multiple water systems, or one-person systems. Photographic documentation is too cumbersome, costly, and time consuming for the benefit received. In some cases this might mean additional personnel to keep track of all the additional data required by this new permit. If funds aren't available to do this, sloppy work usually prevails and shortcuts are made; which frequently lead to compliance problems later. The wording should also be changed to say "250,000 gallons in any one day," instead of "0.25 mgd." AZWC

   It is standard practice that anyone performing any environmental monitoring or field sampling needs to document the sampling event via a field log or the use of equivalent forms. Monitoring data is simply not credible or useful unless the specifics are documented. Photodocumentation is only required if discharges are greater than 250,000 gallons in any one day or if discharges last for more than 4 consecutive days. For water supply company wells which may discharge for short period of time on a daily basis the permit has been changed to allow photodocumentation to be performed quarterly.

Appendix A, Table 1 and 2 Detection Limits

1a. Field meter detection limit. The City is unaware of any field meter that can reliably measure chlorine residuals down to 0.01 mg/l. If the Department has knowledge of such a meter, it would be helpful to forward that information. Absent such information, the City's comment on this is that the 0.01 mg/l detection limit is not feasible and should be replaced with a level that can be reliably read. The City's field meters are routinely able to read 0.1 mg/l chlorine. CoScott

1b. The detection limit for Total Residual Chlorine, specified in Appendix A of the DGP, is practically unattainable under analytical laboratory conditions, let alone field testing. Of the two analytical methods which indicate a potential to achieve this low level of detection, one is not conducive to field testing (amperometric titration); and the other (DPD Colorimetric) is qualified as achieving the low limit of detection “under ideal conditions”, which is a situation that is extremely improbable in the field due to analytical interferences (i.e. turbidity, color, instrument sensitivity, etc). ADEQ stated in it’s response to comments received on the August 7th version of the DGP that field methods are available that achieve these detection limits. We would request that ADEQ coordinate with ADHS to verify that such detection limits can be reached, and the analytical limitations of regularly obtaining those detection limits with field testing equipment. CoGlen

1c. Appendix A, Table 2, Field Equipment Sensitivity or Accuracy Requirements – The sensitivity for total residual chlorine for discharges to non-ephemeral waters cannot be reached with currently existing field chlorine test equipment. CoP

1d. This section requires a laboratory level of 0.01 mg/l for chlorine, and a field equipment sensitivity of 0.50 mg/l for chlorine if discharged to ephemeral waters and 0.010 mg/l if discharged to perennial waters. The water quality standard for chlorines in ephemeral waters, however, is 140 mg/l. In addition, only post-repair flushing of reclaimed water systems when discharged to ephemeral waters

requires chlorine monitoring. Accordingly, detection levels of 0.01 mg/l and 0.05 mg/l for discharges to ephemeral waters are unnecessary and unreasonable. Chlorine monitoring should not be required for discharges to ephemeral waters. If required, dischargers should only be required to use state-approved methods for which detection levels are lower than water quality standards, if available. COT

The Hach Method 10014 has a detection level of 0.003 mg/l. ADEQ recognizes that this level may not always be achieved and therefore, set the level at 0.01 mg/l. In addition, please note that Part A.2 states that the methods used should be rated for the levels in Table 2, but recognizes that interferences may result in higher detection levels. The 10014 method has been approved as an alternate method by EPA and is listed in the Arizona State Laboratory Licensure rules. The level required for discharges to an ephemeral wash has been raised to 0.2 mg/l. Although this is well below the standard, it is a readily achievable level.

2a. Table 1 of Appendix A should not list detection limits of 0.02 mg/l for total phosphorous and total nitrogen. These detection limits are unreasonably low. Including them would not provide any benefit to the water quality of Arizona's waterbodies, because the permit does not appear to limit the levels of these pollutants to concentrations anywhere near this low. It is also unclear why these constituents are listed in Table 1, given that neither is listed in Tables A through D. PAG

2b. The District is not aware of any local laboratories which can reach the laboratory detection level for total nitrogen and total phosphorus. MDWID

2c. The Laboratory Detection Limit for Total Nitrogen is recommended to be changed from 0.02 to 0.10 milligrams per liter. Total nitrogen is a sum of the total kjeldahl nitrogen (TKN) concentration and the nitrate plus nitrite concentrations. The useful detection concentration of the TKN analysis is 0.03 mg/L. The useful detection concentration of the nitrate plus nitrite analysis is 0.01 mg/L. The method detection limit for the sum of the TKN and nitrate plus nitrite is 0.04 mg/L. Analytical laboratories do not typically report down to the MDL. The Arizona Department of Health Services requires analysis of a standard at the reporting level and preparation of a standard curve. It is not typical for an analytical laboratory to run a standard and prepare a standard curve for a concentration at the MDL. CoTW

2d. The detection limit for Total Nitrogen, specified in Appendix A of the DGP, is impractical. Total Nitrogen is the sum of three separate analytical data results; one of which (Total Kjeldahl Nitrogen), does not have a practical limit of analytical detection at or below the 0.020mg/L detection limit stated. Therefore, it is impractical for ADEQ to require an analytical detection limit, which is not statistically obtainable. CoGlen

2e. Total Nitrogen – ADEQ needs to remove the detection limit for total nitrogen because there is no single analytical method for total nitrogen. Total nitrogen is the sum of the results of total Kjeldahl nitrogen, nitrite, and nitrate. CoP

ADEQ recognizes that total nitrogen is a sum of four nitrogen containing compounds (kjeldahl nitrogen including two parameters), however the standard in many unique waters is expressed as total nitrogen. The limits in Table 1 have been raised to 0.05 mg/l based on the comments. Since some nitrogen standards are expressed as annual means and levels of 1.0 mg/l, monitoring should achieve levels less than 1 mg/l.

Appendix A- Tables A through D

1a. The beginning of each Table in Tables A through C includes the following:

> * For other constituents of concern, check Surface Water Quality Standards in 18 A.A.C. 11, Article 1.

Please clarify the use of this asterisk; it appears to expand the discharge limitations. Does this asterisk refer only to those discharges that have a "contaminants of concern" monitoring requirement? PAG

1b. Appendix A, Tables A, B and C – Each of these tables have a box at the beginning that includes the statement "* For other constituents of concern, check Surface Water Quality Standards in 18 A.A.C. 11, Article 1." What is the purpose of this statement? If it is intended to incorporate other parameters from the SWQS, it is an inappropriate method. All parameters intended to be regulated by the permit should be placed in the permit. CoP

1c. The leading concern for this comment period involves the unusual use of an asterisk within Appendix A (Tables A, B, and C). This asterisk is a single footnote that cross-references "other constituents of concern" within all to Title 18 Chapter 11 Article 1. Strict interpretation of the current reference may expand the requirements of the General Permit beyond practical use and therefore, defeat the purpose of a De Minimus permit. This footnote may be better addressed in the text of the permit, by including a general caveat limiting the purpose and use of the general permit. Pima

1d. Please clarify the use of the asterisk below the discharge limitation. An asterisk is usually to reference or clarify a specific statement or word. This use appears to expand the discharge limitations. Pima

As discussed in the stakeholder meetings, ADEQ identified constituents of concern (COC) in the parameters column of the monitoring tables when it was probable that either the source of discharge would contain elevated levels of a parameter not specifically identified at the top of the table or where standards would vary with the receiving water. However, ADEQ also recognizes that, due to blending, water delivered by a drinking water supplier may meet drinking water standards, while an individual well within the system may exceed a drinking water standard. ***In addition, permittees should be aware that for some parameters surface water quality standards are lower than drinking water standards.*** *These include copper, cyanide, and lead. Also surface water standards exist for many parameters that do not have drinking water standards, such as zinc and silver. Again, to clarify this, COC has been added to the parameter column of the tables.*

To further clarify, in some cases the permittee is aware there are or may be other contaminants of concern in their discharges - such as when purging a well with VOC contamination, pesticides, high nitrates, or high arsenic levels, for example. In such cases, the permittee has the responsibility to monitor that parameter in the discharges and ensure that discharges do not exceed water quality standards for the applicable receiving water. Rather than list within this permit every parameter that has a potential to apply for every waterbody, ADEQ incorporated the definition of Constituent of Concern and requires that each permittee identify these, monitor these, and restrict discharge of these or employ treatment, or implement other effective BMPs, as applicable, to ensure the standards are not exceeded.

2a. An additional comment is that an apparent oversight was pointed out to PAG staff on the second page of Table B – "Monitoring and Reporting Requirements for Effluent Dependent Receiving Waters "in Appendix A. ADEQ's "response to comments" e-mailed to stakeholders in October indicated that monitoring requirements for street and building wash water had been removed, but Table B still includes this requirement. PAG

2b. Table B. ADEQ indicated, in its response to August 7 version comments, that monitoring for all "other" discharges to ephemeral water bodies was eliminated to make monitoring consistent for all "other" discharges. Table B, however, still requires monitoring for discharges of street wash water and exterior building wash water to effluent dependent water bodies. Discharges of residential cooling water, swimming pool drainage, and charitable and mobile car wash wastewater to effluent dependent water bodies are exempt form monitoring requirements. Monitoring for all "other" discharges to effluent dependent water bodies should be eliminated. There is no reason to believe that building wash water contains more of any pollutants than car wash water. In addition, enforcement of requirements to conduct analytical monitoring for residential and retail pavement and building wash waster is impossible.

Yes, the monitoring inconsistency was an oversight. Based on comment 1 under "Eligibility". ADEQ has removed the other discharges from the list of those allowed to effluent dependent waters.

3. The language in Table A for Oil and Grease (action level) should also be used for Oil and Grease in Table B, and C. MDWID

   ADEQ agrees and has revised the permit.

4a. Appendix A, Table A, Discharge Limitations – This table sets a 10 mg/L action level for oil and grease. The City contends that ADEQ has no authority to place action levels in AZPDES permits nor do they have the authority to specify a numeric action level to demonstrate compliance with a narrative water quality standard. If ADEQ has a numeric water quality standard for oil and grease, they should put it in the permit. ADEQ also does not have any authority to specify a numeric oil and grease limitation of 10 mg/L as shown in Tables B and C. Such a limitation is unsupported and goes beyond the requirements of complying with Surface Water Quality Standards (SWQS). The oil and grease numeric limitations have no basis and must be removed. CoP

4b. Discharge Limitations – Table A indicates "no numeric standard" for contaminants for which there are no numeric water quality standards. The exception to this is oil and grease, for which an action level of 10 mg/l is established "based on (the) narrative standard". Tables B and C establish discharge limitations of 10 mg/l (narrative standard) for oil and grease. 10 mg/l is a numeric alert level or limitation, respectively. There is no scientific or legal basis for establishing a numeric effluent limitation based on a narrative standard without rule making. An alert level or effluent limitation of 10 mg/l is arbitrary and unenforceable. If monitoring is required for oil and grease, the discharge limitations should indicate "no numeric standard", similar to the indications for other standards. CoT

   ADEQ can and often does include action levels (ALs) and limits in permits based on best professional judgment. Levels of oil and grease at 10 mg/l are commonly considered as causing sheen on waters. In addition, this limit has been used in other similar permits (see comment under Removal of coverage for discharges from used oil and gas lines above), including individual NPDES permits written by EPA. Additionally, ALs are not enforceable limits in that exceedances indicate a permit violation. Rather ALs, signify that additional actions need to be taken in the event the AL is exceeded. The permit has been modified to clarify the expected response in the event of an AL exceedance.

5. The District supports the revised monitoring for chlorine in Tables B and C for potable water system discharges. This revision will reduce unnecessary monitoring where the results would confirm repeatable values. MDWID

   ADEQ appreciates the comment.

6. The District strongly supports having a more user friendly table for the areawide permit application rather than completing multiple forms on the discharges. A sample is attached for consideration. MDWID

   ADEQ appreciates the attempt to create a simplified form. However, the suggested form omits some necessary information from the existing proposed form (discharge ID #, DWR well #, name of closest perennial or intermittent waterbody, description of discharge and any treatment processes, and any amendment information). In addition, the space provided on the suggested form is insufficient for some information (latitude, longitude, receiving water name).

7. Add the word "estimated" to "average daily flow volume" and "flow rate" to Appendix A. Notice of Intent (NOI) for De Minimus Discharges to water of the United States under AZPDES Permit No. AZG2003-002, B. Discharge Information and Notice of Intent (NOI) for Areawide Discharges for De Minimus Discharges to water of the United States Under AZPDES Permit No. AZG2003-002, Discharge Information. The proposed language is consistent with ADEQ current requirements for issuance of an emergency waiver to discharge to ephemeral waters. The types of discharges that are permitted under the ADEQ De Minimus permit do not allow for installation of instrumentation that can attain the proposed flow accuracy requirement. For example, a line break flow rate is difficult to measure due to failed pipes or appurtenances. On site activities should be geared towards repairs and not towards

measuring flow rates when the flow rate can be estimated. The monitoring requirements should reflect the permitted conditions. CoTW

The form allowed applicant to check measured or estimated under the average daily flow volume. In response to the comment, the same check boxes have been added to the flow rate section.

8. Table B – Monitoring and Reporting Requirements for Perennial, Intermittent or Canals with DWS Receiving Waters Notation Footnote (3) – the City proposes the use of an estimate for flow rate here as well. These discharges are not routinely measured. CoP

   Appendix A, Table 2 specifies that flow measurements are to be within 10% if measured or a reasonable estimate if not measured. This applies to all flow measurements required by the DGP in Tables A through D.

9. The Dissolved Oxygen limit (Appendix A. Table B De Minimus Discharges to Effluent Dependent Receiving Waters, Discharge Limitations) is recommended to be changed from 3 mg/L to 1 mg/L. The ADEQ water quality standards (WQS) for dissolved oxygen (DO) for effluent dependent waters for night time and day time conditions range from 1.0 to 3.0 milligrams per liter (mg/L) respectively. The requirement should list the minimum limit for DO consistent with the requirement listed for discharges to perennial, intermittent or canals. The WQS for DO for Aquatic and Wildlife (warm water)/Aquatic and Wildlife (cold water) single sample minimum is 6.0 and 7.0 mg/L, respectively. The De Minimus permit lists the DO concentration limit for this type of discharge as 6 mg/L. Using this same reasoning the DO for effluent dependent waters is recommended to be 1 mg/L. CoTW

   Table C listed both the A&Ww and A&Wc standards for DO (for these standards there is no difference between day and nighttime requirements). Table B has been changed to list the complete standard as well

10. Appendix A, Dissolved Oxygen – It is inappropriate to set a discharge level for dissolved oxygen (DO) because it is not a pollutant and does not act like a pollutant. Rather than having a permit limit, the permit should specify that the discharge should not cause the DO in the receiving water to go below the level set in the SWQS. In addition, Table B incorrectly expresses the DO limit for effluent dependent waters. The DO in the receiving water cannot go below 3.0 mg/L from three hours after sunrise to sunset and cannot go below 1.0 mg/L from sunset to three hours after sunrise. CoP

    Clarification has been added to Tables C and D to specify that the discharge limitation is that the discharge shall not cause dissolved oxygen in the receiving water to fall below the specified level.

11. What is ADEQ's basis for requiring limits to be met for constituents that are not listed in the surface water quality standards (fecal coliform, oil and grease, total dissolved solids and suspended sediment)? These parameters should be removed from the permit because they are not listed in the surface water quality standards. CoP

    No limits are set in Tables A through C for fecal coliform or total dissolved solids. Total dissolved solids are however, listed in the surface water quality standards for some unique waters. Fecal coliform and total dissolved solids have been removed from the tables.

    There is a surface water quality standard for suspended sediment (A.A.C. R18-11-109) for A&Ww and A&Wc. Suspended sediment is listed with no limitation on Tables A and B for clarification.

    Oil and grease is addressed in the standards (A.A.C. R18-11-108(B)). The use of the action level for oil and grease is discussed in the response to comments 4 a & b above.

12 The daily or per discharge monitoring of wells that meet ADEQ requirements and reporting is unfounded when it comes to the number of times a day that wells come on and off line during the daily operation of a water system. Even under area wide permits, documenting the location of <u>all</u> fire hydrants that were flowed, the volume, duration, type of receiving water, what parameters are

monitored for, and frequency are required. This seems unnecessary and overly burdensome because the water passes all drinking water standards except for the Total Residual Chlorine (TRC). The description of Table 2 is "Anticipated discharges that are too numerous to specify," yet it seems that ADEQ is having water systems specify any and all discharges. Dechlorination is already being performed by water systems. TRC should be the only requirement necessary. Estimates of duration and flow for internal reporting already are being performed. AZWC

The permit addresses frequent discharges for areawide authorizations. In each of the monitoring tables there is a footnote allowing flow rates and duration to be described generally for potable well discharges that occur frequently.

No specific chemical monitoring is routinely required for potable water systems other than chlorine. However, other constituents of concern are required when the potable water discharge is known or suspected to exceed a surface water standard. (See response to comment number 1 above.)

Fire hydrants are not required to be identified separately.

13. Area wide permits group discharges into one of many different types of receiving water. A discharge in the Pinetop-Lakeside area may result in a discharge to ephemeral, intermittent and perennial "waters of the U.S." In this case, does the water system list all three types of receiving water on the report, or choose one? Is there a boundary or delineation area (five miles, for example) that water systems are to use when following the flow of discharged water in cases like this? The permit needs to be more specific in this area. AZWC

    The applicant must identify the receiving water for any specified discharge (including well discharges). Since each specified discharge has its own discharge information sheet the receiving water will be identified for each one. If the receiving water is not perennial the applicant is to give the distance to the closest perennial water. If the immediate receiving water is ephemeral the applicant should evaluate the discharges potential to reach the nearest perennial water (based on volume and duration of the discharge and distance to be traveled). If the potential is high the applicant should identify the perennial water as the receiving water and submit the documents required in Part II.A.2.

14. Table C – The chlorine monitoring for O & M and well flushing and well discharges where discharge is expected to reach a flowing stream, the monitoring should allow representative sampling rather than per discharge. Monthly monitoring is too frequent. AZWC

    Chlorine monitoring is only required if chlorine is present in the source water. ADEQ considers the monitoring frequency appropriate considering the low standard and the variable and often high levels of chlorine used in drinking water systems and flushing activities.

15. Table D – For routine well flushing where flow reaches or is likely or expected to reach the flowing stream, measuring chlorine, NTU, Phosphorous, etc. should be representative and not per discharge. Reductions in monitoring should be allowed if sampling documents consistent compliance with standards of receiving water. AZWC

    Table D applies to unique and impaired waters. *Table D indicates that for some of the parameters (See footnote 3) frequent discharges under areawide authorizations will be determined on a case by case basis.*

    NTU and phosphorus are not listed in Table D for potable water systems, but may be required as constituents of concern as unique waters or impaired waters often have standards or limits on these parameters.

16. Table D. If water is discharged to ephemeral "water of the U.S." and does not reach a flowing stream, monitoring requirements of unique water should not apply – except for contaminants which can become a problem in later storm events. AZWC

When the discharge point to an ephemeral waterbody is very close to the confluence with a perennial waterbody such that the discharge is likely to reach that water, requirements of either Table C (or D if applicable) may be applied. This is the reason for requiring the distance to the nearest perennial waterbody be provided on the NOI. Additionally, ADEQ recognizes that in some cases discharges within ¼ mile may not reach a unique waterbody. There may also be discharges greater than 1/4 mile from a perennial water that do reach it based on factors such as volume of discharge, stream bed slope, and soil permeability. ADEQ has chosen a cut-off of ¼ mile that we believe is protective in the majority of cases. Monitoring in areas within ¼ mile of unique waters will be reviewed on a case-by-case basis.

17. Table C, footnote 3 replace the word "chemical" with "contaminant". AZWC

Footnote 3 has been rewritten. It now reads, "For an areawide authorization of discharges that occur on frequent and regular basis, a quarterly statement describing the average flow rate and duration of discharge and discharge characterization is acceptable in lieu of per discharge monitoring. Constituents required to be monitored shall be analyzed at least monthly. The word constituent is used since not all "constituents of concern" would be considered contaminants.

Typographic Errors

1. Table of Contents **-** Needs to be regenerated, page numbers are not correctly referenced throughout the document. Pima

As stated in the e-mail sending the documents, the draft permit was generated in WordPerfect and converted to Word for those using that program. The WordPerfect version appears to have correct page identifications.

2. Part IV.B.5c. **-** Capitalize first word for consistency. Pima

ADEQ has made the correction. Part IV.B.5.c in the draft is now Part IV.B.4.c

3. Appendix D – A word is cut off appears to be the word "City". Pima

Again this appears to be an artifact of the conversion to Word. Additionally, the NOI forms do tend to move when printed on different printers than the one they were created for.

4a. Appendix D, Table 2 – Where is Table 1? Is this supposed to be Appendix E Table 2? Pima

4b. Where is Table 2? Does Appendix D Table 2 belong here? Pima

Appendix D, Table 1 is the Discharge Information form. Appendix D, Table 2 is the Discharge Information Form for Unspecified Discharge Locations.

Fact Sheet

1. Part III.B. Eligibility and Allowable De Minimus Discharge – Pipeline breaks are considered unplanned emergencies and ADEQ plans to not cover these discharges under the DGP. Such releases would require individual consideration and it was also mentioned that in many cases these releases are caused by poor maintenance practices. What does ADEQ mean by "individual consideration"? Most municipalities have a very active maintenance program. It would appear that a best management practice approach would be appropriate for pipeline breaks. City of Phoenix staff are available to discuss this issue. CoP

See comments under removal of coverage for leaks and main breaks above.

2. Part IV.D, Who Needs To Obtain Coverage – Under the draft DGP, ADEQ contemplates that discharges within Municipal Separate Storm Sewer Systems (MS4) with a potential to reach a water of

the U.S. or which are required by the MS4 owner to obtain AZPDES coverage must obtain authorization under the DGP or other AZPDES permit. This would appear to be a duplication of effort or at the very least further complicated the regulation of the de minimus discharges. Are not such discharges already covered under the MS4 permit? This issue needs to be resolved before final DGP is issued. CoP

As previously stated in response to comments and at stakeholder meetings, the fact that MS4s are not required to actively prohibit certain non-stormwater discharges from entering their system does not mean that those discharges are authorized or do not need to be permitted when they enter waters of the U.S…" ADEQ does not believe that any of the present MS4 permits cover De Minimus discharges. If a municipality with an individual MS4 permit has De Minimus discharges specifically addressed in their individual permit (i.e, with appropriate BMPs and monitoring), then they would not need to obtain coverage under the DGP.

3. Part V. Notice of Intent Requirements – To identify every single location where a discharge may occur from a potable water system is prohibitive. Rather a map and description of the service area may be adequate and appropriate. CoP

   ADEQ does not require every location where a discharge will occur to be listed. Discharges from fire hydrants (considered too numerous) and line flushings after repairs, for example, are not required to be specified for areawide discharges. However, known discharge locations such as wells and reservoirs are required. As stated in several responses above, the receiving water (which determines monitoring and BMPs) can only be determined when the location of the discharge is known.

4. Part V. Notice of Intent Requirements – "*A legible scaled map… show the location where the classification changes".* Please clearly specify where specific details of these reaches can be found. There are only generally delineated reaches on the referenced web site. (see Permit Definitions) Pima

   Title 18, Chapter 11, Appendix B, the Surface Water Quality Standards, define the reaches and their associated designations.

5. Part VI. A.4, Permittee – If discharging to a MS4 and the MS4 owner approves the discharge, the City believes a separate permit for the activity is a duplication of effort and overly stringent.

   MS4 owner or operators do not have authority to issue AZPDES permits or to waive requirements of the Clean Water Act. As stated previously, the fact that MS4 owners or operators are not required to actively eliminate or enforce against certain non-stormwater discharges within their MS4 does not mean that such discharges are permitted if they enter a water of the U.S.

6. Part VI.C. Best Management Practices (BMPs) Plans – The first paragraph under the BMPs addresses line breaks and leaks. We thought this permit does not cover these activities. However, with that said, the City of Phoenix supports the use of BMPs to minimize the impact of these types of discharges, if possible, on a case-by case basis.

   The fact that permits are not routinely issued for accidents does not mean that management practices should not be employed to minimize them.

7. Part IV.D, paragraph 2- Typographic error: "Multiple" should be changed to "Municipal".

   ADEQ has corrected the permit.

8. Part IV.B – "30 business days after receipt of the NOI by ADEQ, if there are no discharges within ¼ mile of unique or impaired waters, and…" Cannot find a cross reference to this condition in the permit. (See also comments on unique and impaired waters in the Permit Definitions) Pima

Part II.B of the permit has been revised to specify that if the discharge is within ¼ mile of a unique or impaired water additional review time is required.

9. Part VI.D Monitoring and Reporting- "*The permittee must report… The permit gives a phone number".* Please include a fax number… there is no way of knowing if a message is received and a fax is a record for both parties. Pima

   The permit does provide a fax number. The fact sheet has been corrected.

10. Part VII.B. "*Duty to Reapply… If the general permit expires and the permit is not reissued, the expired permit is automatically extended."* For clarity use the permit language from V. B. 2. *If the Director does not reissue a general permit before the expiration date, the current general permit will be administratively continued and remain in force and effect until the general permit is reissued.* Pima

    ADEQ has further clarified the fact sheet in response to the comment. However, the Fact Sheet does not need to repeat the permit verbatim.

11. Part VII.B. "*Duty to Reapply… If the general permit expires and the permit is not reissued, the expired permit is automatically extended."* Does the Department wish to have this extend to those General Permits issued on Unique Waters? Pima

    Yes.

Scope of Coverage

ADEQ responded to August 7 version stakeholder comments on jurisdiction by stating that "ADEQ responded to a similar comment on the previous version of the draft DGP." ADEQ's response to the jurisdictional issue in the previous version of the DGP, supported the applicability of the proposed permit to all "surface waters", as defined in Arizona's water quality standards, by eluding to the requirements of the Clean Water Act and supporting regulations.

By using this justification to include all "navigable waters" within the scope of this permit, ADEQ has ignored a federal mandate to obtain formal EPA headquarters approval prior to asserting jurisdiction over non-navigable waters:

"In view of the uncertainties after SWANCC concerning jurisdiction over isolated waters that are both intrastate and non-navigable based on other grounds listed in 33 CFR § 328.3(a)(3)(i)-(iii) (i.e., use of the water by interstate or foreign travelers for recreational or other purposes; the presence of fish or shellfish that could be taken and sold in interstate commerce; use of the water for industrial purposes by industries in interstate commerce), field staff should seek formal project-specific Headquarters approval prior to asserting jurisdiction over such waters, including permitting and enforcement actions. (68 FR 1996, Advanced Notice of Proposed Rulemaking on the Clean Water Regulatory Definition of 'waters of the United States"' January 15, 2003.

Without the "formal project – specific Headquarters approval" described above, ADEQ is contradicting a federal mandate by asserting jurisdiction over those water bodies characterized in A.A.C. R18-11-101(43)(c)(i) through (iii). CoT.

ADEQ disagrees with the commenter's position and does not read the 'federal mandate' in the same manner. Additionally the SWANCC proceedings have little to do with ephemeral waterbodies that are waters of the U.S., by virtue of the tributary rule. In any event, the AZPDES statute clearly asserts authority over 'navigable waters'. Further the AZPDES program approval documents, including the state Attorney General's statement, clearly states that navigable waters is equivalent to the definition of 'surface waters' in R18-11 for purposes of the AZPDES program. ADEQ does not currently plan any changes in the scope of the program with respect to jurisdictional waters.

Request for Extension:

1. We request that the comment deadline for this permit be extended for 60 days. A number of changes were made to the proposed permit relatively late in the process of developing it. At least one of these changes, the removal of permit coverage for line breaks, does not appear to have been made in response to comments received from stakeholders. Considering that several years were required to develop the permit, a 30-day comment period is not sufficient to address the significant changes that were made late in the process. PAG

   ADEQ continues to believe that line breaks are not appropriate for permit coverage. (See previous comments.)

   ADEQ also notes the process of developing this permit has been quite lengthy and debate over the permit provisions could feasibly continue for some time. However, ADEQ considers that the need to provide coverage for the other eligible discharges should not be further delayed and has proceeded with the issuance of this permit.

2. In conjunction with extending the comment period, ADEQ should provide ample opportunity for the 21 tribes in Arizona to review the draft permit. By making this comment, we are not suggesting that the permit coverage be extended to include tribal lands. However, as a courtesy to the tribes, ADEQ should coordinate with them on this permit, because lands under state jurisdiction and lands under tribal jurisdiction are present in the same watersheds and can be affected by adjacent discharges. PAG

   ADEQ followed the public notice requirements of the AZPDES rules for General Permit issuance, and did not see a significant benefit to further extension of the comment period.

   Other changes to the DGP based on further ADEQ review:

   Part I.B.4 and 5- The classes of allowed reclaimed water were changed to allow only reclaimed water of A+ and B+ quality. Since Class A and B reclaimed water is not denitrified it would not meet Aquifer Water Quality Standards for Nitrate and therefore would not meet the requirements for the general APP under A.A.C. R18-9-B301(B).

   Part I.B.6- mobile car washes have been removed from the permit because these discharges are not consistent with APP requirements.

   ADEQ has made the two changes above because it has identified that they would not meet the APP general permit requirement. However, since all AZPDES discharges are also required to have an Aquifer Protection Permit, all dischargers that obtain coverage under the De Minimus permit must assure that they are eligible for coverage under an APP general or otherwise meet the APP requirements.

   Part IV.C Wording was added to clarify that some action levels are also listed in Appendix A, Tables A, B, C, and D. Part IV.C.2 was added to state actions that would be necessary if an action level is exceeded.

   Part IV.D.4 and 5 were added to specify that the BMP Plan must be signed, available on site or at an easily available location during normal business hours, submitted to ADEQ upon request, and updates implemented if ADEQ notifies the permittee of deficiencies.

   A definition of municipal separate storm sewer systems (MS4s) was added to specify that for purposes of this permit MS4 applies only to regulated MS4s.

   Appendix A, Table A- Chlorine was specified as a constituent of concern for any discharges that are superchlorinated for purposes of disinfecting a pipeline or well.

For clarification a nitrate/nitrite limitation was added to Appendix A, Table C for waterbodies with designated DWS uses in addition to the listed nitrogen designation. The nitrate/nitrite limitation was always applicable to these discharges as a contaminate of concern.